



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program
Sanitary Sewer Overflow (SSO)/Bypass
Notification Form

FOR DEP USE ONLY

Tax Identification Number

A. Reporting Facility

1. Facility Information

Hull, MA WPCF

MA0101231

Reporting Sewer Authority

Permit #

2. Authorized Representative Transmitting Form:

Aram

Varjabedian

781-925-0906

First Name

Last Name

Telephone No.

Plant Manager

avarjabedian@woodardcurran.com

Title

E-mail Address

B. Phone Notifications:

1. MassDEP staff contacted:

Contacted By Email

David

First Name

Burns

Last Name

Date/Time contacted:

03/02/2018 02:23 PM

Contacted by:

2. EPA staff contacted:

Contacted by: Email

David

First Name

Turin

Last Name

Date/Time EPA contacted:

03/02/2018 02:23 PM

3. Board of Health contacted:

Contacted by:

see below.

First Name

Last Name

Date/Time contacted:

4. Others notified:

Town Manager - Philip Lemnios by email on 3/2/18. Harbormaster, Board of Health Agent, Division of Marine Fisheries, Conservation Agent, and DPW Director contacted at the time of this report. [3/7/18]

Contacted by: All by Email

Comments Initial email on 3/2/18 due to potential for high flows, power loss, and flow diversion. Actual SSO from chlorine contact tank on 3/3/18.



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C. SSO Information

1. SSO Discovered: _____
By: Plant Staff _____ Date and Time 03/03/2018 12:00 PM
2. SSO Stopped Date and Time 03/02/2018 04:03 PM
3. SSO Discharge from: Other
Sanitary Manhole, Pump Station, Backup into property, Other - Specify Below
Specify: Chlorine contact tanks - Disinfected wastewater overflowed from chlorine contact tank basins at the Hull WPCF.
High influent flows to the WPCF exceeded peak plant design.
4. SSO Discharge to: Ground Surface and to adjacent catch basins to the WPCF.
Ground Surface, Direct to Receiving Water, Catch Basin to Receiving Water, Backup into Basement
Specify: Catch basins drain into Allerton Harbor [Hull Bay]
- Location: 1111 Nantasket Ave., Hull, MA
(Description of discharge site or closest address)
- X,Y Coordinates 42.306530, -70.901977
5. Estimated SSO Volume at time of this Report: 25,000 gallons, best estimate
Method of Estimating Volume: Other Specified Below
Other Method: Calculated based upon impacted area, duration and visual estimate.
6. Cause of SSO Event: Rain Event, Other - Specify Below
Rain Event, PS Failure, Insufficient Capacity in System, Treatment Unit failure, Sewer System Blockage, Pipe Collapse, Root Intrusion, Grease Blockage, Other
Specify: Rain event/"Noreaster event" and astronomical high tides & tidal surge. Conditions caused inflow and infiltration to the sewer system, that increased flows to the facility which exceeded the peak design of 8.0 MGD.
The high storm tide levels and surge caused the capacity of the gravity outfall to decrease below the actual effluent flow pumped to the chlorine contact tanks during the high tide period.
7. Corrective Actions : The new and recently installed headworks/influent isolation gate was throttled down to reduce flow into the WPCF during this period of high tide and high flow, to lessen and stop the chlorine contact tank overflow
Impact Area cleaned and/or disinfected: Yes Corrective Actions Completed: Yes
Details: The spilled Wastewater was treated wastewater effluent and disinfected. During the event, there was also seawater that came over the sea wall located across the street from the plant that also contributed to the water on the ground around the chlorine contact tanks



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D. Comments/Attachments/Follow-up

Additional comments and
planned actions:

See attached correspondence emails and photos

I wish to provide the following:

Attachement

Attachement, Additional Comments, No Additional Comments or Attachements

Map

Photo 1

Photo 2

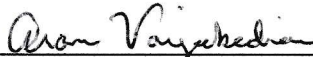
Photo 3



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E. Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Signature of Authorized Representative

3/7/2018

Date Signed

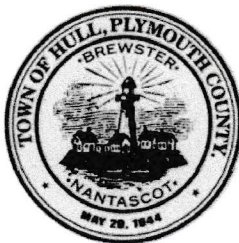
Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from

MassDEP Regional Office and EPA Telephone and Fax Numbers:

Northeast Phone:	978-694-3215	Fax:	978-694-3499
Southeast Phone:	508-946-2750	Fax:	508-947-6557
Central R Phone:	508-792-7650	Fax:	508-792-7621
Western F Phone:	413-784-1100	Fax:	413-784-1149
EPA Cont. Phone:	617-918-1870	Fax:	617-918-0870
DEP 24-hr Phone:	888-304-1133		

Town of Hull Wastewater Treatment Plant

1111 Nantasket Avenue
Hull, MA 02045
(781) 925-1207

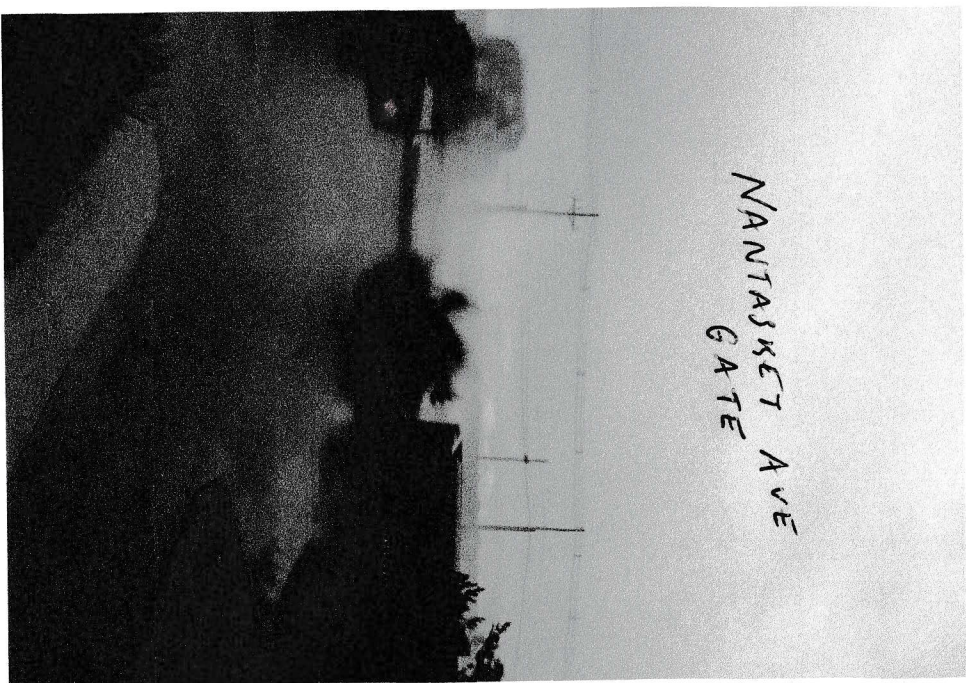


NPDES Permit #
MA0101231

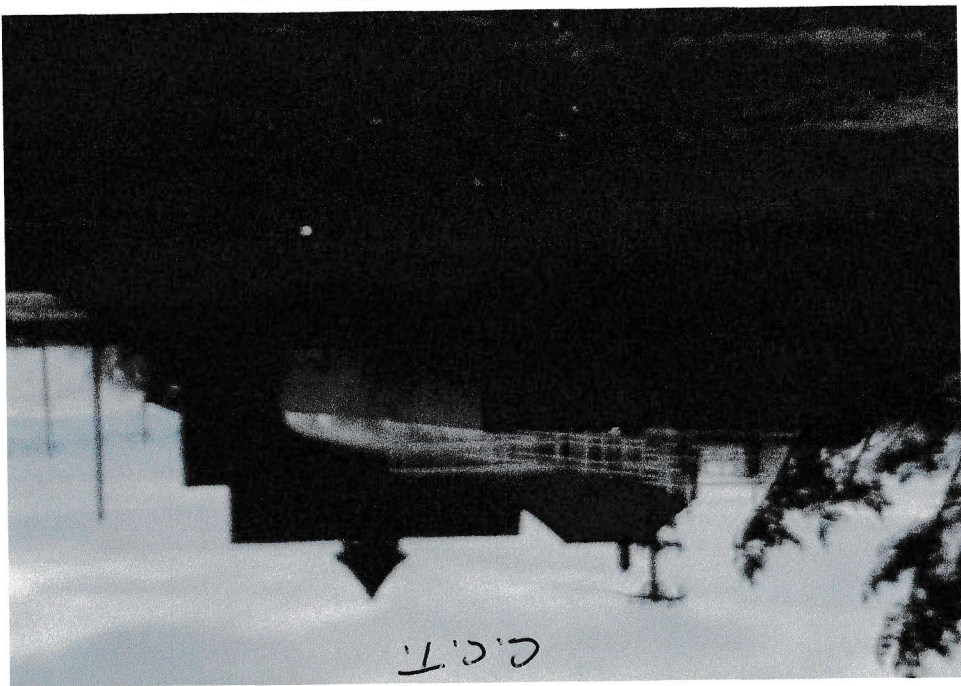
Unauthorized Discharge Summary to Surface Waters Hull WPCF 1111 Nantasket Ave., Hull, MA [3/3/18]

Location (address or latitude and longitude);	<i>On SSO form</i>
Date and Time unauthorized discharge began;	<i>On SSO form</i>
Date and Time unauthorized discharge stopped;	<i>On SSO form</i>
Source of the notification (e.g., property owner, field crew, police);	<i>On SSO form</i>
Type of asset from which the unauthorized discharge occurred (e.g., station, manhole, main);	<i>Hull WPCF</i>
Estimated gallons released;	<i>On SSO form</i>
Method used to estimate volume;	<i>On SSO form</i>
Cause of the unauthorized discharge, (blockage or break; mechanical, electrical, or structural failures);	<i>On SSO form</i>
If caused by a blockage, identify the type of blockage (e.g., grease, rags, debris);	<i>N/A</i>
If caused by a mechanical, electrical, or structural failure, the date of the last inspection, maintenance, or repair of the failed asset;	<i>NA</i>
Did the release reach any portion of the Town's Municipal Separate Storm Sewer System ("MS4").	<i>Yes</i>
If the release occurred to the ground, provide the location of the nearest down-gradient catch	<i>See attachment photo</i>

basin and the name of the receiving water to which the catch basin discharges;	
Did the release reach a wetland or surface water? If so, include the name and exact location where?	<i>yes</i>
Measures taken to minimize the volume and duration of the unauthorized discharge;	<i>See corrective action on SSO form</i>
Measures taken to clean the area where the unauthorized discharge occurred;	<i>On SSO form</i>
Corrective actions taken to prevent reoccurrence of unauthorized discharges at the same location;	<i>Potentially activate the throttling of the influent gate sooner, if conditions allow.</i>
Date of the last unauthorized discharge in the same general location;	<i>April 1, 2017</i>

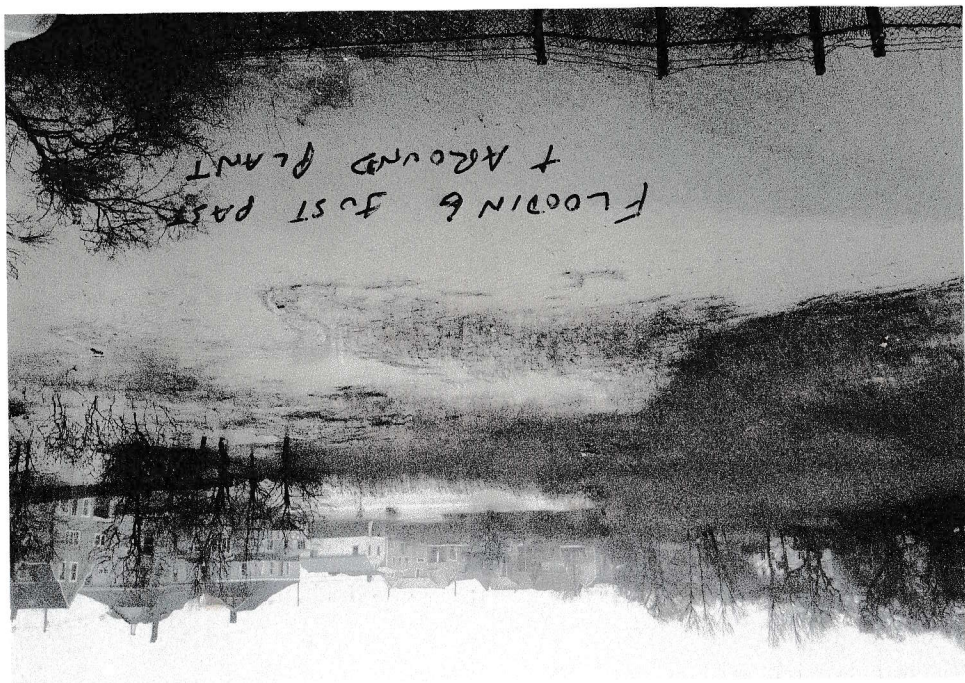


NANTASSET AVE
GATE

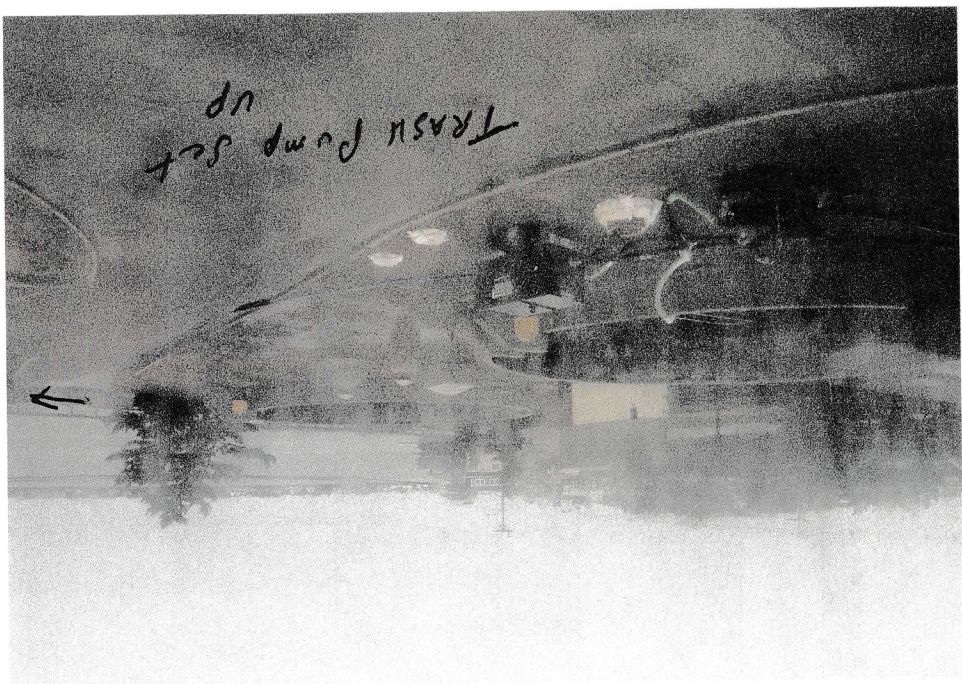


C.I.T.

SPILL OVER LEFT WALL



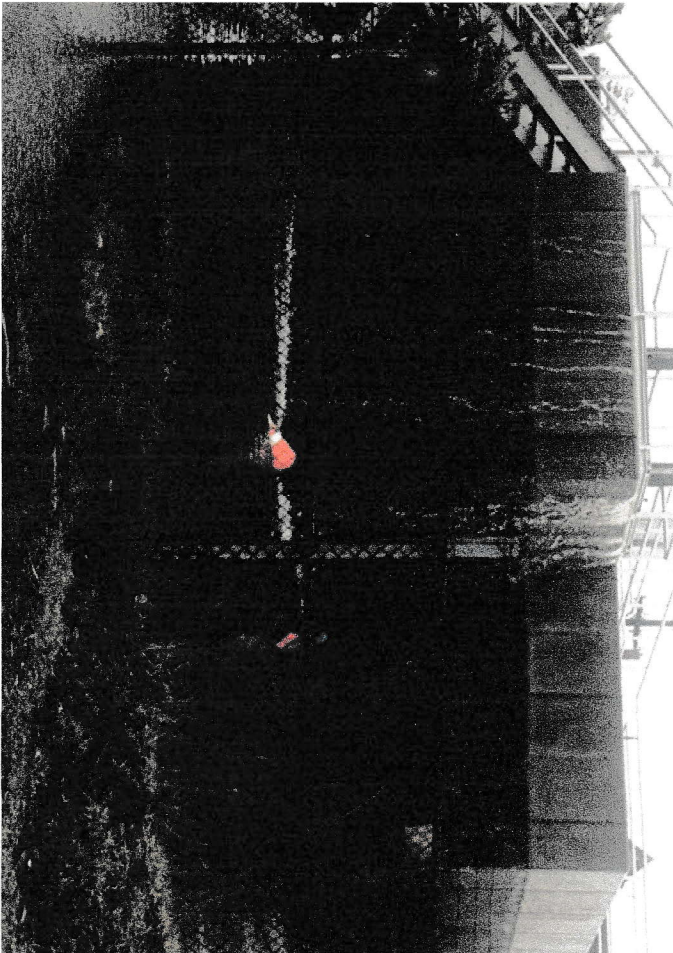
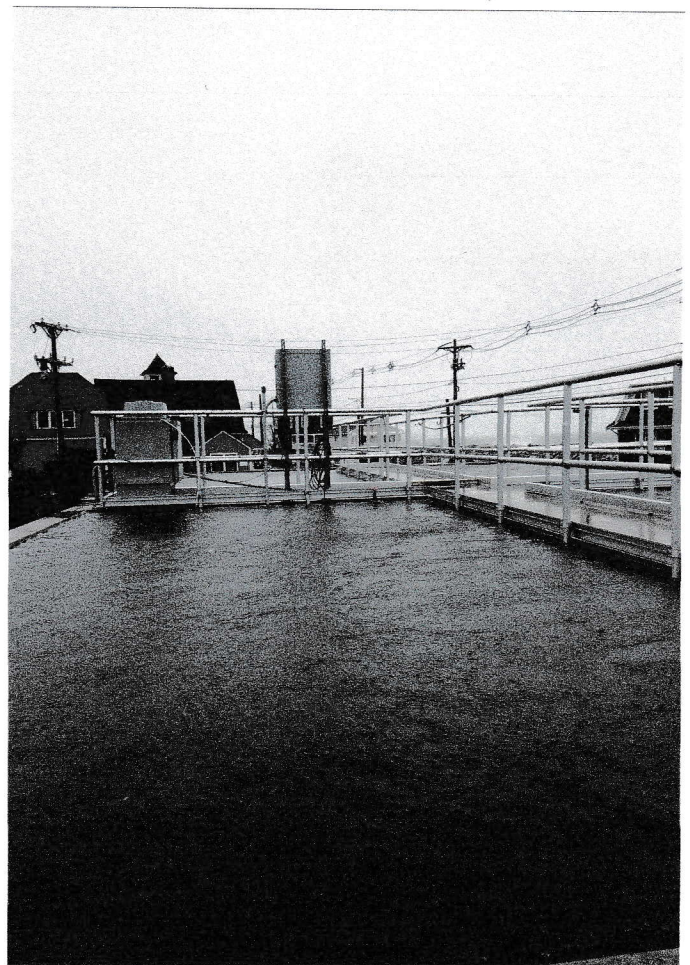
FLOODING JUST PAST
+ AROUND PLANT



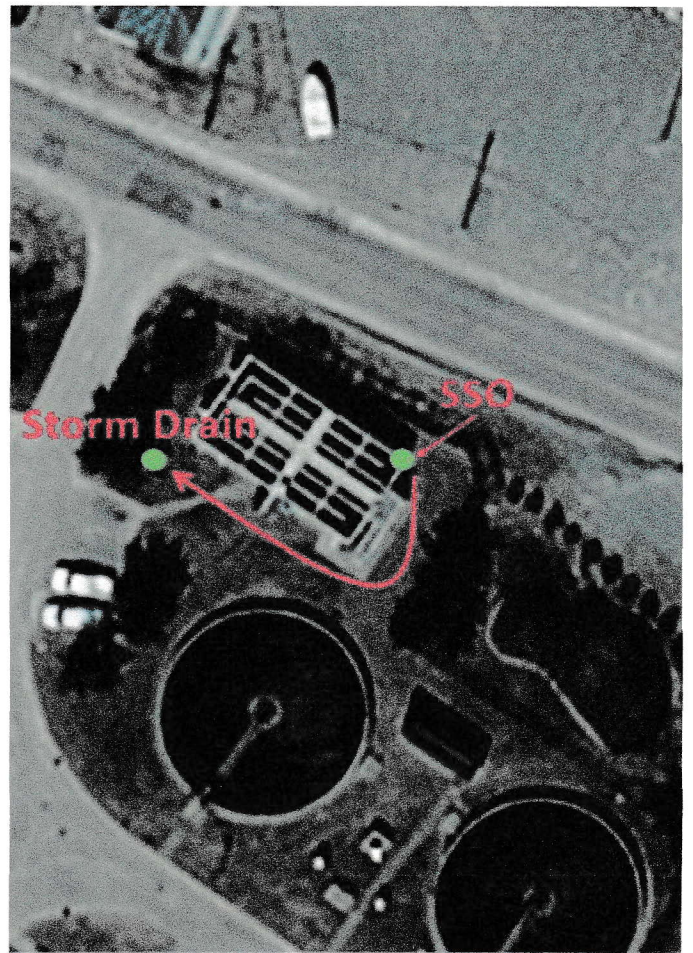
TRASH PUMP SET
UP

3-3-18

FULL CHLORINE CONTACT TANKS



SPILLOVER



Aram Varjabedian

From: Aram Varjabedian
Sent: Tuesday, March 06, 2018 5:48 PM
To: david.burns (david.burns@state.ma.us); Turin, David (Turin.David@epa.gov)
Cc: jstruzziery (jstruzziery@town.hull.ma.us); Lemnios, Philip (plemnios@town.hull.ma.us); Kate Roosa (kroosa@woodardcurran.com); Bill Boornazian; Frank Cavaleri; Robert Scott (rscott@woodardcurran.com); 'jonathanhobill@state.ma.us'
Subject: FW: Hull Plant update & SSO - MA0101231
Attachments: image002.png

All:

This is an update for the recent storm activities at the Hull WPCF, since Saturday March 3rd. The facility has been staffed 24/7 through 11:30pm Monday March 5th. Some of the notes may be a repeat of information from submittal by Frank Cavaleri on 3/3/18.

The loss of power continued through Sunday March 4th until power was restored to all of the pump stations and the plant at approximately 6:20pm.

From the last submission on 3/3/18, the plant process mode of operation has been contact stab mode, to reduce solids loading on the secondary clarifiers and eventually the aeration system air was turned off to retain secondary biomass at 1:45pm, and the return activated sludge pump turned off at 3:30pm. Chlorination for disinfection was maintained throughout the entire high flow period.

Upon power restoral, flows had dropped down to an acceptable level [6 MG] and the secondary systems turned back on at 6:30pm on Sunday evening March 4th.

Since March 4th, the facility has been managing the flows that have been influenced by high tides and street flooding.

The period of time where the chlorine contact overflowed onto the adjacent area was 4 hours on Saturday March 3rd from 12:00pm to 4:03pm when al, plant effluent pumps were running and portable trash pumps operating, also pumping from secondary tanks to the chlorine contact tanks. The influent gate located in the headworks was utilized to reduce influent flow to the facility, in order to halt the overflow from the chlorine contact tanks.

A full SSO report will be submitted by end of day on 3/7/18.

Should you need to reach me, please contact me at the plant or by cell phone.

Sincerely,

Aram

Aram Varjabedian
Plant Manager
Hull Wastewater Treatment Facility
1111 Nantasket Avenue | Hull, MA 02045
Phone 781.925.0906 | Fax 781.925.3056 | Cell 339.214.8334 www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

-----Original Message-----

From: Frank Cavaleri
Sent: Sunday, March 04, 2018 5:37 AM
To: Aram Varjabedian <avarjabedian@woodardcurran.com>
Cc: Robert Scott <rscott@woodardcurran.com>
Subject: FW: Hull Plant update - MA0101231

fyi

-----Original Message-----

From: Burns, David (DEP) <david.burns@state.ma.us>
Sent: Sunday, March 4, 2018 1:35 AM
To: Frank Cavaleri <fcavaleri@woodardcurran.com>
Subject: RE: Hull Plant update - MA0101231

Thanks for the info Frank, I am keeping up with all my facilities while here in Seattle (sunny and nice the last couple of days) with John Hobill (in to: list)current contact in office for this while I'm away. Dave

From: Frank Cavaleri [fcavaleri@woodardcurran.com]
Sent: Saturday, March 3, 2018 9:45 PM
To: Aram Varjabedian; Burns, David (DEP); Turin, David (Turin.David@epa.gov); jonathanhobill@state.ma.us
Cc: jstruzziery@town.hull.ma.us; Robert Scott; Lemnios, Philip (plemnios@town.hull.ma.us); Bill Boornazian; Kate Roosa
Subject: FW: Hull Plant update - MA0101231

All,

This is an update to the severe storm conditions in Hull and treatment plant operations:

Following the first high tide Friday morning, we have had two additional high tides, both with more powerful winds, rain and coastal flooding. We filled our two empty aeration tanks after the flows increased on Friday afternoon, and the secondary treatment process has been in pass through mode, with aeration and the return sludge pumps shut off. We have been able to maintain primary treatment and disinfection throughout, with estimated flows over 10 MGD early Saturday morning. A brief power outage/blip occurred around 3:30 PM on Friday, so we have been running on generator power since then, to avoid further utility power outages. The Town lost full utility power around 7 PM, and they hope to have it restored on 3/4/2018. The plant generator has been running well. We set up 3 portable pumps to aid our effluent pumping capacity, with all discharging to the chlorine contact tank (CCT). We have utilizing the newly replaced influent gate to throttle influent flows while monitoring the interceptor levels.

Between power outages and issues with our Verizon communications, we have lost SCADA access to our pump stations. We have increased our pump station manual checks in the meantime, as we work with Verizon to address the communication issues.

When flows exceeded about 8 to 10 MGD at high tide periods, our CCT has had minor to moderate overflows, during both the Friday Midnight high tide and the Saturday mid-day high tide. We will provide additional details and flow estimates when we submit our SSO report.

Currently (9:30 PM 3/3/2018) we are maintaining around 5-7 MGD. We are preparing for the next high tide this Saturday evening, although anticipate less severe flooding.

We have been staffing the plant 24 hrs with various levels of plant and support staff.

More to come - thx – frank

Frank J. Cavaleri
Sr. Principal
Woodard & Curran

Dedham Office telephone: (781) 613-0441

Dedham Office fax: 781-251-0847

cell: 617-590-4571

email: fcavaleri@woodardcurran.com<mailto:fcavaleri@woodardcurran.com>

Mailing Address: 980 Washington Street, Suite 325, Dedham, MA 02026-6732

www.woodardcurran.com<https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>

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From: Aram Varjabedian

Sent: Friday, March 2, 2018 2:23 PM

To: david.burns (david.burns@state.ma.us<mailto:david.burns@state.ma.us>)

<david.burns@state.ma.us<mailto:david.burns@state.ma.us>>; Turin, David

(Turin.David@epa.gov<mailto:Turin.David@epa.gov>) <Turin.David@epa.gov<mailto:Turin.David@epa.gov>>;

jonathanhobill@state.ma.us<mailto:jonathanhobill@state.ma.us>

Cc: jstruzziery@town.hull.ma.us<mailto:jstruzziery@town.hull.ma.us>; Frank Cavaleri

<fcavaleri@woodardcurran.com<mailto:fcavaleri@woodardcurran.com>>; Robert Scott

<rscott@woodardcurran.com<mailto:rscott@woodardcurran.com>>; Lemnios, Philip

(plemnios@town.hull.ma.us<mailto:plemnios@town.hull.ma.us>)

<plemnios@town.hull.ma.us<mailto:plemnios@town.hull.ma.us>>

Subject: Hull Plant update - MA0101231

Good afternoon:

I am providing an update of the Hull facility's status. So far, no power loss issues. We have had the first high tide period, and influent flows have risen to approximately 8 MG. A number of the pump stations have high wet well alarms, due to the rain and tidal surge. The rain is continuing, and there are two additional high tides forecasted over the next 24 hrs.

All plant equipment is operating adequately at the present time, however, we may need to throttle the influent isolation gate as flows continue to rise and pumping capability is almost already maximized. The secondary aeration system is still on, but the aeration air is being shut down, to retain biomass, and due to the off line aeration tanks being full

In the event that some flow will need to be diverted, We wanted to inform you now, and will make all attempts to process through the facility.

Should you need to reach me, please contact me at the plant or by cell phone.

Sincerely,

Aram

Aram Varjabedian
Plant Manager
Hull Wastewater Treatment Facility
1111 Nantasket Avenue | Hull, MA 02045
Phone 781.925.0906 | Fax 781.925.3056 | Cell 339.214.8334
www.woodardcurran.com<https://urldefense.proofpoint.com/v2/url?u=http-3A__www.woodardcurran.com_&d=DwMFAG&c=IDF7oMaPKXpkYvev9V-fVahWLOQWnGCCAfCDz1Bns_w&r=Vq4BEMQuyJ-WyN1YyLpmDiFtaG4ZxFhcA8bjWruAw7g&m=MNtdJ-Lr0eog-vPXjx0TSbRY2QTWZ-tmNzXD7XdR8ZU&s=9PmJH8s32RqL6TTMIciaF1H5td9SGWeRZ8-RiokH1oA&e=>>

[Description: W&C transparent blue email sized] COMMITMENT & INTEGRITY DRIVE RESULTS